

Appl. No. : 10/719,500
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AMENDMENTS TO THE CLAIMS

Claims 1-54 were pending prior to entry of these amendments. Please amend Claims 1, 4, 5, 8, 9, 18, 31, 42, 47, and 52. Please cancel Claims 2, 3, 7, 11, 12, 27, and 41.

1. (Currently amended) A cervical medical device, comprising:
an elongated member sized to be inserted into an undilated cervical canal;
an expandable mechanism attached to the elongated member; and
an anchoring feature to anchor the device within the cervical canal, wherein the anchoring feature is an uneven outer surface of the expandable mechanism when it is expanded.
2. (Canceled)
3. (Canceled)
4. (Currently amended) The device of Claim ~~[[3]]~~ 1, wherein the expandable mechanism is a corrugated balloon.
5. (Currently amended) The device of Claim ~~[[3]]~~ 1, wherein the expandable mechanism is a ridged balloon.
6. (Original) The device of Claim 1, wherein the elongated member comprises a lumen running through a length of the device.
7. (Canceled)
8. (Currently amended) The device of Claim ~~[[3]]~~ 1, wherein the anchoring feature is a series of spaced ridges along a length of the expandable mechanism.
9. (Currently amended) A cervical anchoring method, comprising:
inserting a hollow tube into a cervical canal;
inserting at least one expandable dilator into the cervical canal; and

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radially expanding the at least one expandable dilator within the canal to dilate the cervical canal while the tube is in the canal, wherein the at least one expandable dilator has an uneven outer surface.

10. (Original) The method of Claim 9, wherein the at least one expandable dilator is attached to the outer surface of the hollow tube.

11. (Canceled)

12. (Canceled)

13. (Original) The method of Claim 10, wherein the at least one expandable dilator has a corrugated outer surface.

14. (Original) The method of Claim 10, wherein the at least one expandable dilator has an uneven outer surface.

15. (Original) The method of Claim 10, wherein the at least one expandable dilator has a ridged outer surface.

16. (Original) The method of Claim 10, wherein the at least one expandable dilator comprises a series of two balloons along the tube.

17. (Original) The method of Claim 16, wherein the series of two balloons comprises an anchor balloon distally of a dilating balloon.

18. (Currently amended) A cervical dilating device, comprising:
an elongated member having a proximal end and a distal end;
a first expandable component attached to the distal end of the elongated member;
and

a second expandable component attached to the elongated member proximally of the first expandable component, wherein the second expandable component has an uneven outer surface.

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19. (Original) The device of Claim 18, wherein the elongated member comprises a lumen running through an entire length of the device.

20. (Original) The device of Claim 18, further comprising an expansion mechanism coupled to the first and second expandable components, wherein the expansion mechanism is configured to expand the first and second expandable components.

21. (Original) The device of Claim 20, wherein the expansion mechanism is a fluid-filled syringe.

22. (Original) The device of Claim 20, wherein the expansion mechanism is a gas-filled syringe.

23. (Original) The device of Claim 18, wherein the first and second expandable components are independently expandable.

24. (Original) The device of Claim 18, wherein the first and second expandable components are inflatable balloons.

25. (Original) The device of Claim 18, wherein the first expandable component is a rounded balloon and the second expandable component is a cylindrical balloon.

26. (Original) The device of Claim 18, wherein the first and second expandable components are adjustable between a radially collapsed condition and a radially expanded condition.

27. (Canceled)

28. (Original) The device of Claim 18, wherein the second expandable member has a length between 40 millimeters and 100 millimeters when expanded.

29. (Original) The device of Claim 18, wherein the second expandable member has a diameter between 5 millimeters and 20 millimeters when expanded.

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30. (Original) The device of Claim 18, wherein the second expandable member has a diameter less than about 3 millimeters when collapsed.

31. (Currently amended) A cervical sealing device, comprising:
an elongated member having a proximal end and a distal end;
an expandable seal assembly attached to the elongated member, wherein the seal assembly has an uneven outer surface in an expanded condition.

32. (Original) The device of Claim 31, wherein the elongated member comprises a lumen running through a length of the device.

33. (Original) The device of Claim 31, further comprising an expansion mechanism coupled to the seal assembly, wherein the expansion device is configured to expand the seal assembly.

34. (Original) The device of Claim 33, wherein the expansion mechanism is a fluid-filled syringe.

35. (Original) The device of Claim 33, wherein the expansion device is a gas-filled syringe.

36. (Original) The device of Claim 31, wherein the seal assembly has a length between 40 millimeters and 100 millimeters when expanded.

37. (Original) The device of Claim 31, wherein the seal assembly has a diameter between 5 millimeters and 20 millimeters when expanded.

38. (Original) The device of Claim 31, wherein the seal assembly is a corrugated balloon.

39. (Original) The device of Claim 31, wherein the seal assembly is a balloon having a series of evenly spaced ridges along its length;

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40. (Original) The device of Claim 39, wherein the balloon has between 3 and 4 ridges.

41. (Canceled)

42. (Currently amended) A method of dilating a cervical canal, comprising:
inserting a dilating device into the cervical canal, the dilating device comprising an elongated member, a first expandable component attached to a distal end of the elongated member, and a second expandable component attached to the elongated member proximally of the first expandable component, wherein the second expandable component has an uneven outer surface;

expanding the first expandable component;

retracting the dilating device until resistance is felt while the first expandable component is expanded; and

expanding the second expandable component in the cervical canal after retracting.

43. (Original) The method of Claim 42, wherein the device further comprises an expansion mechanism coupled to the first and second expandable components.

44. (Original) The method of Claim 42, wherein the first and second expandable components are expanded using a fluid-filled syringe coupled to the first and second expandable components.

45. (Original) The method of Claim 42, wherein the first and second expandable components are expanded using a gas-filled syringe coupled to the first and second expandable components.

46. (Original) The method of Claim 42, wherein the first and second expandable components are rigid-walled balloons.

47. (Currently amended) A method of sealing a cervical canal, comprising:

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introducing a sealing device in the cervical canal, the device comprising a tube and an expandable seal assembly attached to the tube, wherein the seal assembly has an even uneven outer surface when it is expanded; and
expanding the seal assembly after introducing.

48. (Original) The method of Claim 47, wherein the device further comprises an expansion mechanism coupled to the seal assembly.

49. (Original) The method of Claim 48, wherein expanding comprises filling a balloon with a fluid.

50. (Original) The method of Claim 47, wherein seal assembly is a balloon having a series of spaced ridges along its length.

51. (Original) The method of Claim 47, wherein seal assembly is a corrugated balloon.

52. (Currently amended) A method of providing a seal for a cervical canal, comprising:

inserting a cervical sealing device into the cervical canal, the device comprising a cannula having ~~a plurality of valves, and~~ an inflatable balloon attached to the cannula, wherein the balloon has an uneven outer surface when inflated; and
inflating the balloon while the device is in the cervical canal.

53. (Original) The method of Claim 52, wherein the device further comprises an obturator.

54. (Original) The method of Claim 53, further comprising removing the obturator after the cannula is inserted.